

## REMARKS

Favorable reconsideration of this application, in view of the present amendment and in light of the following discussion, is respectfully requested.

Claims 1 and 7 have been amended. Claims 1-4 and 7-10 are pending and under consideration.

### **Official Consideration of IDS Requested**

Applicant has found, in the USPTO PAIR database, initialed copies of the PTO form 1449 for the IDS submitted on October 10, 2007. Applicant respectfully requests confirmation that this IDS was considered.

### **Rejections under 35 U.S.C. § 103**

In the Office Action, at pages 2-4, claims 1-2, 4, 7-8, and 10 were rejected under 35 USC § 103(a) as being unpatentable over Tagar et al. (U.S. Patent Application No. 2004/0208608) in view of Zhou (U.S. Patent Application No. 2003/0219198).

Tagar et al. and Zhou, alone or in combination, do not discuss or suggest:

an amount of residual dispersion at the second optical repeater node is smaller than an amount of residual dispersion at each of the plurality of first optical repeater nodes,

as recited in amended claims 1 and 7.

If 40Gbit/s optical signals are sent through the wrong spans, including spans other than the spans specified in claim 1, a dispersion compensation profile for the wrong spans becomes not suitable for 40Gbit/s optical signals, thereby degrading significantly a characteristic of transmission. Therefore, transmission spans for 40Gbit/s optical signals are restricted to the spans specified in claim 1, more specifically, between the transmitting end station and the second optical repeater node, between adjacent second optical repeater nodes, and between the second optical repeater node and a receiving end station. These features are not disclosed by the combination of Tagar et al. and Zhou. As 40 Gbit/s optical signals are more susceptible to the residual dispersion than lower rate optical signals, transmission between the transmitting end station and the second optical repeater node, between adjacent second optical repeater nodes, or between the second optical repeater node and a receiving end station becomes suitable, or the other spans are not suitable for 40Gbit/s optical signals. Therefore, the features upon which applicant relies are now recited in the rejected claims. Thus, the rejections of claims 1 and 7 are now moot.

Since the cited prior art references, alone or in combination, do not discuss or suggest all of the features of claims 1 and 7, claims 1 and 7 each distinguish over the cited prior art. Accordingly, withdrawal of the rejection of claims 1 and 7 is respectfully requested.

Claims 2 and 4 depend directly from claim 1, and include all the features of claim 1, plus additional patentable features that are not discussed or suggested by the cited prior art. Therefore, claims 2 and 4 patentably distinguish over the cited prior art for at least the reasons noted above. Accordingly, withdrawal of the rejection of claims 2 and 4 is respectfully requested.

Claims 8 and 10 depend directly from claim 7, and include all the features of claim 7, plus additional patentable features that are not discussed or suggested by the cited prior art. Therefore, claims 8 and 10 patentably distinguish over the cited prior art for at least the reasons noted above. Accordingly, withdrawal of the rejection of claims 8 and 10 is respectfully requested.

In the Office Action, at page 4, claims 3 and 9 were rejected under 35 USC § 103(a) as being unpatentable over Tagar et al. in view of Tagar et al. and Tsuritani et al. (U.S. Patent No. 6,768,872).

As discussed above, Tagar et al. and Zhou do not discuss or suggest all of the features of independent claims 1 and 7. Tsuritani et al. fails to make up for these deficiencies, such that claims 1 and 7 each patentably distinguish over the cited prior art. Claims 3 and 9 depend directly from claims 1 and 7, respectively, and include all the features of claims 1 and 7, respectively, plus additional patentable features that are not discussed or suggested by the references relied upon. Therefore, claims 3 and 9 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the rejection of claims 3 and 9 is respectfully requested.

## **CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

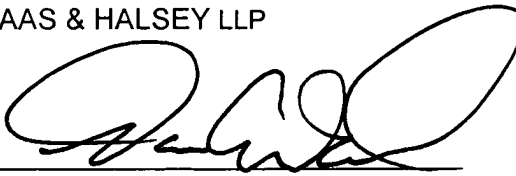
Serial No. 10/777,675

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By:   
Aaron C. Walker  
Registration No. 59,921

1201 New York Avenue, N.W., 7th Floor  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501